

application to include Figures 5 and 7 as in the parent application.

Additionally, prior to examination of the application, please amend the claims as follows:

In The Claims:

Please cancel Claim 1, without prejudice.

Please substitute therefore, the following new Claims 103-132, as follows.

1 103. (New) Apparatus for implantation in a blood vessel that has a lumen, a wall and a vessel
2 wall defect, said apparatus comprising:
3 an intravascular member that has a radially collapsed configuration of a first diameter and
4 a radially expanded configuration of a second diameter, said intravascular member being
5 advanceable while in its radially collapsed configuration to a position within the lumen of the blood
6 vessel adjacent to the vessel wall defect and then expandable to its radially expanded configuration
7 wherein it engages the vessel wall and is thereby held in substantially fixed position within the
8 lumen of the blood vessel adjacent to the vessel wall defect; and,
9 an embolus member that is transluminally advanceable through the lumen of the blood vessel
10 and placeable within the vessel wall defect;
11 the intravascular member being operative to prevent the embolus member from escaping
12 from the vessel wall defect and into the lumen of the blood vessel.

1 104. (New) Apparatus according to Claim 103 wherein the intravascular member self expands
2 from its radially collapsed configuration to its radially expanded configuration.

1 105. (New) Apparatus according to Claim 103 wherein the intravascular member is pressure
2 expandable such that it expands from its radially collapsed configuration to its radially expanded
3 configuration in response to the application of outwardly directed radial force thereupon.

1 106. (New) Apparatus according to Claim 103 wherein the intravascular member comprises
2 a helical coil.

1 107. (New) Apparatus according to Claim 103 wherein the intravascular member comprises

1
2 an outer layer and an inner layer.

103 C3 1 6 108. (New) Apparatus according to Claim 107 wherein the outer layer and the inner layer are formed of a continuous strand.

1 7 109. (New) Apparatus according to Claim 103 wherein the intravascular member is formed of a shape memory alloy.

1 8 110. (New) Apparatus according to Claim 103 wherein the embolus member comprises a thrombogenic member.

112 1 9 111. (New) A method for treating a defect in the wall of a blood vessel that has a lumen and a wall, said method comprising the steps of:

- 3 A. providing an intravascular member that has a radially collapsed configuration of a first diameter and a radially expanded configuration of a second diameter;
- 4
- 5 B. transluminally advancing the intravascular member, while in its radially collapsed configuration, into the blood vessel and to a position within the blood vessel lumen adjacent to the vessel wall defect;
- 6
- 7
- 8 C. radially expanding the intravascular member to its radially expanded configuration such that it engages the wall of the blood vessel and is thereby held in substantially fixed position within the vessel lumen adjacent to the vessel wall defect;
- 9
- 10
- 11 D. providing an embolus member sized to fit within the vessel wall defect;
- 12
- 13 E. positioning the embolus member within the vessel wall defect such that the intravascular member embolus retains the embolus member withing the vessel wall defect.
- 14 delete

112 1 11 112. (New) A method according to Claim 111 wherein Step E is performed before Step C.

12 1 113. (New) A method according to Claim 111 wherein Step E is performed after Step C.

1 ¹³ 114. (New) A method according to Claim 113 wherein Step E comprises:
2 i. positioning a delivery catheter having a distal end within the intravascular
3 member after it has been radially expanded in Step C;
4 ¹³ causing the distal end of the delivery catheter to advance through a portion
5 of the intravascular member and into the vessel wall defect;
6 iii. delivering the embolus member out of the distal end of the delivery catheter
7 and into the vessel wall defect; and,
8 iv. removing the delivery catheter, leaving the embolus member within the
9 vessel wall defect with the intravascular member preventing the embolus
10 member from escaping from the vessel wall defect into the lumen of the
11 blood vessel.

1 ¹⁴ 115. (New) A method according to Claim 114 wherein the intravascular member comprises a
2 helical coil having a plurality of convolutions with spaces therebetween and wherein step ii
3 comprises advancing the distal end of the delivery catheter through a space between two adjacent
4 convolutions of the helical coil and into the vessel wall defect.

1 ¹⁵ 116. (New) A method according to Claim 111 wherein the vessel wall defect is an aneurysm
2 and wherein Step E comprises positioning the embolus member within the aneurysm.

1 ¹⁶ 117. (New) A method according to Claim 116 wherein the aneurysm is a wide mouthed
2 aneurysm and wherein Step E comprises delivering the embolus member through the mouth of the
3 aneurysm and into the aneurysm sac.

1 ¹⁷ 118. (New) A method according to Claim 116 wherein the aneurysm is a cerebral aneurysm.

1 ¹⁸ 119. (New) A method according to Claim 111 wherein the embolic member delivered in Step
2 E comprises a thrombogenic member.

119

1 120. (New) An intravascular flow modifier apparatus for treating a defect in a blood vessel wall
2 into which blood flows from the lumen of the blood vessel, said apparatus comprising:

3 at least one biocompatible member that is initially disposable in a collapsed configuration
4 and is thereafter transitionable to an expanded configuration, when in its expanded configuration
5 said at least one member defining a blood flow channel and a flow modification region;

6 said intravascular flow modifier apparatus being deliverable, while in its collapsed
7 configuration, through the blood vessel lumen to a location within the blood vessel lumen adjacent
8 to the vessel wall defect and said apparatus being thereafter transitionable to its expanded
9 configuration such that blood flowing through the lumen of the blood vessel may flow through the
10 blood flow channel of the apparatus and the flow modifying region of the apparatus is positioned
11 adjacent to the vessel wall defect so as to modify blood flow from the lumen of the blood vessel into
12 the vessel wall defect.

120

1 121. (New) An apparatus according to Claim 120 wherein the biocompatible member self-
2 expands from its radially collapsed configuration to its radially expanded configuration.

121

1 122. (New) An apparatus according to Claim 120 wherein the biocompatible member is
2 pressure expandable from its radially collapsed configuration to its radially expanded configuration
3 in response to the application of outwardly directed radial pressure thereupon.

122

1 123. (New) An apparatus according to Claim 120 wherein the biocompatible member
2 comprises a helical coil.

123

1 124. (New) An apparatus according to Claim 120 wherein the biocompatible member
2 comprises an outer layer and an inner layer.

124

1 125. (New) An apparatus according to Claim 124 wherein the outer layer and the inner layer
2 are formed of a continuous strand.

125

1 126. (New) An apparatus according to Claim 120 wherein the biocompatible member is formed

CA2
CS1 of a shape memory alloy.

126
1 (New) An apparatus according to Claim 120 wherein the biocompatible member comprises
2 at least one elongate strand which, when in its expanded configuration, is substantially in the form
3 of a curved figure eight wherein the strand crosses itself, the flow modifying region being the region
4 of the apparatus where the strand crosses itself.

127
1 (New) A method for treating a defect in a wall of a blood vessel that has a lumen and a
2 wall, the method comprising the steps of:

- 3
4
5
6
7
8
9
10
11
12
13
- A. providing an apparatus that i) is initially disposable in a collapsed configuration and
is thereafter transitionable to an expanded configuration and ii) when in its expanded
configuration comprises a blood flow channel and a flow modification region;
- B. positioning the apparatus, while in its collapsed configuration, within the lumen of
the blood vessel adjacent to the defect;
- C. positioning and expanding the apparatus to its expanded configuration such that i)
the apparatus engages the wall of the blood vessel to hold the apparatus in a
substantially stationary position within the blood vessel lumen, ii) blood flowing
through the blood vessel lumen passes through the blood flow channel of the
apparatus and iii) the flow modifying region of the apparatus is positioned relative
to the defect to decrease blood pressure within the defect.
- Sub C
NM

112
128
1 (New) A method according to Claim 120 wherein the vessel wall defect is an aneurysm,
2 Step B comprises positioning the apparatus within the blood vessel lumen adjacent to the aneurysm
3 and Step C comprises positioning and expanding the apparatus such that the apparatus modifies
4 blood flow in a way that decreases strain on the aneurysm.

129
130
1 (New) A method according to Claim 129 wherein the aneurysm is a wide mouthed
2 aneurysm and Step C comprises positioning and expanding the apparatus such that the flow
3 modifying region is next to the mouth of the aneurysm.

130
131
1 (New) A method according to Claim 129 wherein the aneurysm is a cerebral aneurysm.